Abstract Of The Disclosure

An electrical component is proposed, in particular a high-frequency microelectronic or microelectromechanical component having a base element that is provided with a feedthrough, a first conductive structure extending on an upper side of the base element being connected by the feedthrough, continuously for high-frequency electromagnetic waves, to a second conductive structure extending on a lower side of the base element. The feedthrough has the form of a right prism or cylinder, and the first and/or the second conductive structure is embodied as a planar waveguide, in particular as a coplanar waveguide. Also proposed is a method for producing an electrical component having a feedthrough for high-frequency electromagnetic waves through a base element, an electrically conductive layer being applied on an upper side of the base element and an etching mask being applied on a lower side of the base element; a trench, having at least almost perpendicular sidewalls and penetrating through the base element, then being etched into the base element in a plasma etching step; an electrically conductive layer being applied on the lower side after the etching and after removal of the etching mask; and the trench lastly being filled or lined with an electrically conductive material.